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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/048,099	01/24/2002	Claude Gebler	GEBLER ET AL-1 PCT	1576

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EXAMINER

LAWRENCE JR, FRANK M

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

10/048,099

Applicant(s)

GEBLER ET AL.

Examiner

Frank M. Lawrence

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-17, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 18 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet *within the range of 50 to 150 words*. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. *The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided*. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

No abstract on a separate sheet has been submitted with the application, therefor the abstract of the international filing has been used.

2. The disclosure is objected to because of the following informalities: references to specific claim numbers in the specification such as on pages 1 and 2 (to "claim 12") should be removed because the claims may be amended or renumbered during prosecution. In line 3 of the amended last paragraph of page 5, "13 her" should be changed to "13 here".

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12-16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the German reference (DE 4322226 A1) in view of Erdmannsdorfer (4,632,682).

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5. DE '226 discloses a fluid filter comprising a tubular cylindrical filter element (1) with opposing sealing collars (2) made of an integral, injection-molded, elastic, polyurethane plastic imbedded with the filter ends. Each collar includes an end disk portion (2C) mounted on the axial ends of the filter element, a sealing portion (2A) acting radially and coming to rest on a cylindrical sealing surface (3C) of the filter body that is coaxially inserted into the filter, and ring-shaped supporting means (2D) extending from the end disk and contacting the filter body end parallel to the end disk (see figure 5). Each portion of the collar is integral and elastic such that an increasing axial deformation of the collar causes an increasing radial adjustment of the seal in the direction of the radial sealing effect. The sealing portion of the collar is made up of two axial sections defined by a clamping element (4) and joined together by the sealing portion (2A) that forms the thickest portion that tapers away towards the axial sections in each direction.
6. The instant claims differ from the disclosure of DE '266 in that the filter body includes an inner frame that supports the filter element radially and the end disks axially. Erdmannsdorfer ('682) discloses an air filter comprising a cylindrical inner support frame (41) for supporting a filter element and end caps (see figure, col. 3, lines 24-32). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the filter of DE '266 by including an internal support frame in order to provide a means for preventing the axial compression and deformation or the collapse of the element due to clamping pressure exerted by the filter housing and fluid pressure exerted by outside-in flow through the element, resulting in maintaining the filter shape and a higher filtration efficiency.
7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE '226 in view of Erdmannsdorfer ('682) as applied to claim 12 above, and further in view of WO 97/41939.

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8. DE '226 in view of Erdmannsdorfer ('682) discloses all of the limitations of the claims except that the annular collar has a corrugated or zigzag-shaped profile. WO '939 discloses an integral filter sealing end cap comprising a sealing portion that has a zigzag-shaped profile (figure 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the seal of DE '226 in view or Erdmannsdorfer ('682) by incorporating a zigzag shaped sealing profile in order to provide a seal that has more than one sealing points so that the probability of a leak due to seal failure is decreased.

*Allowable Subject Matter*

9. Claims 18 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 18, the arrangement of the seal as recited and in combination with claims 12 and 16 is not suggested in the prior art of record. With respect to claim 21, no suggested is found in the prior art to use a thermoplastic ether-ester elastomer seal in the combined filter and integral endcap/sealing member recited in claim 12.

*Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose sealing arrangements for fluid filters.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 703-305-0585. The examiner can normally be reached on Mon-Thurs 7:30-5:00; alternate Fridays 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Frank Lawrence

  
Patent Examiner 5-19-03

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May 19, 2003